

Kober (G. M.)

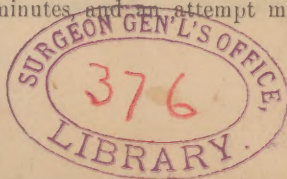
experience admit. I have during the last eight years treated more cases of dysentery than any other disease, but I have never seen a single case followed by abscess of the liver, unless it were in a person addicted to drink. I have never seen or heard of a case of dysentery in children followed by hepatic abscess. Dr. Murillo has seen but one case of hepatic abscess in women, but he does not state that it came on after dysentery. And yet this latter complaint as frequently attacks women as it does men. I conclude, therefore, that, whilst no doubt can be entertained as to the noxious influence of the combined effects of climate and drink upon the functions of the liver, dysentery cannot be held accountable for hepatic complications, unless occurring in subjects given to alcoholic excesses.

ART. XV.—*Report of a Case of Gunshot Wound of the Right Knee-Joint and Right Hand.* By GEORGE M. KOBER, M.D., Acting Assistant Surgeon U. S. Army.

SERGEANT EDWARD McM., æt. 24 years, left this post Dec. 5th, 1874, for the purpose of hunting. It appears he had hidden his gun in the sagebrush the day previous, and, leading his horse with the left hand, he stooped to pick up the piece with the right hand, taking hold of the gun near the extremity of the barrel, the muzzle directed towards his body. Whilst doing so, the piece accidentally discharged its contents (a load of duck shot), shattered the barrel, and wounded the sergeant, whose horse returned to the camp; and one of the men, fearing that some accident had befallen its rider, started in the direction from whence the horse came, and, finding the man disabled, returned to procure assistance. With men and a stretcher I started for the scene of the accident, and found the sergeant wounded in the right-knee and hand. The hemorrhage and shock were comparatively slight, and the patient was at once removed to the hospital.

After removal of the clothing, the wound of the knee was carefully examined, and it was found that the load had entered near the tuberosity of the external condyle of the right femur, passed obliquely upwards and inwards, and escaped near the lower part of the semitendinosus muscle. Small fragments of the bone were found in the wound, and, together with pieces of wadding, clothing, and dirt, removed.

From the fearful proximity of the gun when exploded, the charge had made a similar wound to that produced by a bullet, and owing, no doubt, to the flexed position of the joint, and the oblique direction of the load, the wound was more superficial in character, involving, however, the tuberosity of the external condyle, the lower part of the biceps, and the internal hamstring, which was severed. Capillary hemorrhage was controlled by injections of cold water through the wound, which also served to remove loose remaining foreign particles. A lotion composed of aquæ font. Oij; alcohol, ʒvj; acid. carbol. cryst. ʒj, was faithfully applied every twenty minutes, and an attempt made, in accordance with



the patient's strong wishes, to treat the case on the expectant plan. I now directed my attention to the wounded hand, and found that the soft parts of the palmar surface, particularly the flexor brevis and abductor minimi digiti muscles, were extensively lacerated, and the first phalanx of the ring finger totally deprived of its soft parts. After giving the patient two ounces of whiskey, I amputated the finger (by flap operation) through the middle of the second phalanx. The lacerated soft parts of the hand were replaced and secured by sutures and adhesive strips. The above lotion was also applied to the wounded hand, and $\frac{1}{4}$ grain of morph. sulph. administered. The following mixture was ordered to be repeated every three hours, while the patient continued awake:—

R. Morphiae acet. grs. ij; spt. æth. nitr. ʒij; sacchari albi, ʒij; aquæ camph. fʒiiss; liq. ammon. acet. fʒiv.—M. ft. mist.

A tourniquet was applied loosely over the femoral artery, and instructions given in case of hemorrhage.

December 6, 7 A. M. Pulse 100. Has slept some, feels pretty well, experiences no discomfort in the wounded members; anodyne and local applications to be continued. *9 P. M.* Pulse 116; skin covered with gentle perspiration; has slept several hours during the day.

7th, 7 A. M. Pulse 103; has slept more or less during the night; expresses himself comfortable. The wounds were syringed with warm carbolated water (Oij-ʒj), and a pledget of lint saturated with carbolated glycerine (ʒij-ʒj) was introduced into the opening of the wound near the external condyle. The lotion and anodyne mixture to be continued, and ʒiv of sol. magn. citr. repeated every four hours until an evacuation of the bowels is procured. *9 P. M.* Pulse 101; feels comfortable; perspires gently. Anodyne mixture suspended.

8th, 7 A. M. Pulse 95; slept but little on account of flatulency; bowels moved this morning; feels comfortable, but weak. Wound of the knee discharges freely shreds of necrosed tissue—syringed out with warm carbolated water. The hand looks favourable, healthy granulations are seen in the lacerated tissues, and the stump of the finger promises to heal by first intention. Local and general treatment continued. *9 P. M.* Pulse 105; anodyne mixture every two hours until sleep is induced.

9th, 7 A. M. Pulse 93. Has slept comfortably; a slight discharge of laudable pus from the orifice of the knee wound is perceived. Wound syringed out with warm carbolated water, and carbolated pledget of lint introduced. Sutures from the stump of finger and hand removed, and dressed with carbolated cosmoline; warm carbolated-water dressings to be applied every hour to the knee. Valentine's meat juice, milk diet, and five grains citrate of iron and quinia three times a day. *9 P. M.* Pulse 107. Anodyne mixture every two hours until asleep.

10th, 7 A. M. Pulse 92. Has slept well. Discharge from the knee wound moderate. *9 P. M.* Pulse 106. Anodyne mixture every two hours.

11th, 7 A. M. Pulse 92; feels pretty well; appetite good; discharge moderate. Treatment continued, and a dose of magnesia and rhubarb given. *9 P. M.* Has had a passage; complains of no pain. Anodyne mixture, if necessary, to procure sleep, and this to be given every night if required.

12th, 7 A. M. Pulse 90; has slept well. Discharge moderate. Local and general treatment continued. At noon, complains of pain and tenderness in the knee; swelling, which has been moderate heretofore, more

marked. A dose of the anodyne mixture and warm local applications repeated every fifteen minutes produced ease and comfort. 9 P. M. Pulse 105. No pain.

13th, 7 A. M. Pulse 94. Has had a comfortable night's rest. Appetite good, partakes freely of meat juice, chicken soup, and milk. Discharge moderate. Healthy granulations about the orifice of the wound. Hand looks well. General and local treatment continued, and two ounces of sherry wine three times a day.

14th, 7 A. M. Pulse 89; has slept well, and expresses himself comfortable; appetite good; discharge considerable. Local and general treatment continued. Bowels moved by an enema of warm water.

15th, 7 A. M. Pulse 96. Slept pretty well. Discharge more plentiful than is compatible with a normal process. Local treatment continued, and five grains of quiniæ sulph. added to each dose of the citrate of iron and quinia. 9 P. M. Pulse 105. Anodyne mixture if required.

16th, 7 A. M. Pulse 90. Has slept well; feels comfortable. Treatment continued, except a substitution of whiskey for the wine, as the latter appears to disagree with the milk diet.

17th, 7 A. M. Pulse 86. Has rested well. Discharge from wound of the knee considerable. Treatment continued. Bowels moved by an enema of warm water. 9 P. M. Pulse 90. Bowels moved twice since the enema was given.

18th, 7 A. M. Pulse 86; has slept but little without the anodyne mixture. Wounds dressed as usual. Treatment continued. In the afternoon, feels feverish; pulse 108. Diaphoretic mixture given.

19th. At 7 A. M. pulse 84; slept but little; wound of the knee discharges a large amount of pus. Suppuration of the joint suspected; swelling and darting pains marked. Carbolated glycerine pledget and warm applications still continued.

20th, 7 A. M. Pulse 92; slept very well; discharge copious; wounds dressed as usual; treatment continued. At 9 P. M. pulse 108.

21st, 7 A. M. Pulse 90; slept well; discharge copious; stump of the finger entirely well; hand requires but simple cosmoline dressing; treatment continued; more swelling of the joint and neighbouring tissue. Apprehensions as to a successful issue of the case under the expectant treatment entertained. It is quite certain that suppuration of the joint has taken place, and possibly inflammation of the connective tissue in the vicinity particularly of the fascia lata. The nature of the case explained to the patient, and his chances for life without operative interference clearly pointed out. Amputation proposed as his only good chance for life, but the patient objected, and seemed quite willing to embrace the worst chances. 9 P. M., pulse 104.

22d, 7 A. M. Pulse 94; slept more or less during the night; discharge from the knee wound copious and fetid; treatment continued. At 9 P. M. pulse 108.

23d, 7 A. M. Pulse 95; slept well; wound discharges fetid pus; treatment continued. 9 P. M., pulse 104.

24th, 7 A. M. Pulse 110; has had a chill during the night, followed by fever and profuse perspiration; discharge copious and offensive; local and general treatment continued; increase the quinia to 10 grains in addition to the citrate of iron and quinia, and the whiskey to 8 ounces per day. There is marked tenderness over the patella, and fluctuation along the outer aspect of the thigh. Injected warm carbolated water into the

exit wound, for the purpose of removing shreds of necrosed connective tissue, and followed it with an injection of carbolated glycerine (3ij-3j), one fluidrachm was injected at the time. The discharge makes its escape through the exit wound. An incision was made for the escape of pus on the outer aspect of the thigh. 9 P. M., pulse 109.

25th, 7 A. M. Pulse 102; slept pretty well; has had a night-sweat. Discharge from the wound copious and offensive; appetite very good. Local treatment continued; acid. sulph. arom. gtt. xv, with 10 grains of quinia three times a day; opium gr. j at bedtime. 9 P. M., pulse 115.

26th, 7 A. M. Pulse 110; discharge the same in quantity and quality; treatment continued; hectic flush well marked; appetite good; in spite of the unfavourable change patient appears quite cheerful. 9 P. M., pulse 112; tr. opii gtt. xxv at bedtime.

27th, 7 A. M. Pulse 96; slept pretty well; perspired some; discharge still copious and offensive; treatment continued. 9 P. M., pulse 108; has had a good appetite, and feels comfortable; tr. opii gtt. xxv at bedtime, to be repeated if necessary.

28th, 7 A. M. Pulse 95; slept pretty well; discharge unchanged in character and amount; treatment continued. 9 P. M. pulse 112.

Perhaps it will be too tedious to follow up the details of the case as exhibited by the daily record; suffice it, then, to say that the case, in spite of all treatment, assumed the form of chronic suppurative inflammation of the knee-joint, complicated at various times with the formation of abscesses in close proximity to and above the joint. February 22d an examination while the patient was under the influence of ether satisfied me that no caries of the bone existed. The entrance wound had been closed by granulations, and in place of the exit wound existed a fistulous opening, which appeared to communicate with the joint, the popliteal space, and higher up. It seemed as if all the connective tissue in the vicinity had been the prey of inflammation, and was now presenting a sluggish granulation tissue, and that this low form of inflammation had a tendency to spread upwards beyond the middle of the thigh. The enlarged white and bloodless appearance of the joint, the tendency to pointing in several places, the fatty and cheesy character of the discharges, indicated to me that there no longer existed an active inflammation, but that I had to deal with a low form of inflammation incapable of generating normal tissue. The cheesy odour of the discharge, which was seen to consist, under the microscope, of pus cells, irregular nucleoli, and an ill-defined detritus, fragments of cells and disorganized connective tissue, and indistinct finely granular and fatty masses, reminded me involuntarily of the microscopical character of tubercle. I became convinced that in order to benefit the patient without resorting to an operation (to which he still objected), I must resort to other means than those heretofore applied. At this time my eye met the article of Mr. Richard Barwell on the treatment of chronic strumous synovitis, more especially of the knee (vide *American Journal of Medical Sciences* for January, 1875), and I was greatly pleased with the treatment suggested by him. I determined to use a solution of iodine as directed by him, viz., tr. of iodine, 3ss; water, 3vijss, and I added 16 drops of pure carbolic acid. On account of the fistulous opening I employed a glass penis syringe, instead of a hypodermic syringe, and injected one drachm of the solution once a day, and by manipulation endeavoured to bring the injection in contact with the tissues involved. Scarcely any pain followed the use of these injections, and after their faithful employ-

ment for a month I believed that I was doomed to disappointment, at least I could perceive none of the brilliant effects I had pictured to me. Upon reflection, however, I considered that my failure had its origin first in the strength of the solution, and second in the formation of abscesses in the cellular tissue far above the point of application. I therefore increased the strength of the solution, using tr. iodine, ℥j; glycerinæ, ℥vij; acid. carbol. cryst. gtt. xvj, and, finding that the object was still unattained, cautiously and gradually increased the strength until it reached the following proportion: R. Tr. iodinii, ℥vj; glycerinæ pur. ℥ij; acid. carb. cryst. gtt. xvj.—M. ft. sol. One drachm of this strong solution was injected at a time into the fistulous opening at intervals of three days, and it was not until after three weeks' employment that the smarting and pain it produced satisfied me that the desired effect would be obtained. The joint gradually assumed a healthy appearance in size and colour, and healthy granulations filled up the undermined tissue in the popliteal space. The fistulous opening was allowed gradually to close.

After this I had to contend with the formation of two abscesses in the cellular tissue, midway of the thigh, and upon its outer aspect. These were opened, and after the evacuation of the pus two drachms of the solution were injected. June 28th, the last abscess which had formed in the gluteal region spontaneously opened, and after the evacuation of the pus two drachms of the solution were injected. This seemed to excite the sluggish tissue to normal cell formation, and the last of the abscesses finally closed.

The drain to the system by excessive suppuration, the absorption of disintegrated products of inflammation, the consequent hectic fever, had left their impress on the patient's system and vital powers, and at times he seemed to be on the very brink of death. Liberal doses of quinia and whiskey, and the patient's ability to partake freely of nutritious food, kept him afloat until the iodine gradually but surely changed the character of the disease. I am perfectly satisfied that nothing but the iodine of the strength which I employed brought about the favourable change, and therefore regard it a most excellent remedy, not only in cases in which Mr. Barwell employed it, but also in all cases where the surgeon is obliged to treat a case of gunshot or other wound involving the joint, which has assumed the character of chronic inflammation, on the expectant plan, instead of resorting to the knife. The patient has recovered with an ankylosed joint, and after performing for several months the duties of an acting commissary sergeant, was discharged April 2d, 1876, from the service.

CAMP McDERMIT, NEVADA, May 13, 1876.

ART. XVI.—*Intussusception; Cure by Inflation.* Read before the Medical Society of Yokohama, Japan, June 17, 1876. By STUART ELDRIDGE, M.D., Surgeon Yokohama General Hospital.

JUNE 11th, at 6 P. M., I was called to see J. G., aged 17 months, in general remarkably strong and healthy. The child had been ailing for several days, with constipation and slight fever at night, seemed also to

BRIEF.

No. of Inclosures,